Miniature Magnetoresistive Multitap Sensor

Abstract

A small-size magnetoresistive device which allows measurement of spatial distribution of magnetic field along one axis with high resolution is disclosed. The magnetoresistive device includes: a magnetoresistive stripe oriented along the measurement axis; a plurality of conductive layers comprising electrodes distributed along the length of the stripe, separated by insulating layers. The measurement of the spatial distribution of the magnetic field is performed by analyzing signal levels between electrodes.